CLAIM AMENDMENTS

1 - 11. (canceled)

12. (currently amended) A device for the selective detection and/or quantification of super [[power]] paramagnetic and/or ~~thermal~~ ferromagnetic particles with analytes, the device comprising:

a vessel [[with]] for holding an analyte to be detected or to be quantified,

at least one oscillator for producing ~~frequencies of alternating magnetic fields~~ an alternating modulating magnetic field of predetermined frequency and an alternating scanning magnetic field with a frequency different from that of the modulating magnetic field,

at least one field generator connected to the oscillator for subjecting the analyte to ~~alternating~~ the modulating magnetic field and to the scanning magnetic field at the same time,

a magnetic field sensor for measuring a response magnetic field of the particles,

a first phase-sensitive detector connected to the magnetic field sensor and responsive to the frequency of the amplitude of the response magnetic field at the frequency of the scanning magnetic field, and

a ~~t least one~~ second phase-sensitive detector connected to the first phase-sensitive detector

13. (currently amended) The device according to claim 12 comprising at least one frequency divider [[s]] for dividing the frequency of the oscillator.

14. (currently amended) The device according to claim 13 wherein the frequency divider ~~or frequency dividers~~ divides the oscillator frequency in proportions of whole positive numbers.

15. (previously presented) The device according to claim 13, wherein the frequency dividers divide the oscillator frequency into the ratios

1/l , 1/m*n , and 1/n,

where l, m, and n are positive whole numbers.

16. (previously presented) The device according to claim 13 wherein the frequency dividers divide the oscillator frequency in the ratios of

1/(n + m) , 1/n(n+m), and 1/n ,

where m and n are positive whole numbers.

17. (canceled)

18. (currently amended) The device according to claim 15 [[with]] wherein m [[as]] is an even number.

19. (previously presented) The device according to claim 13 with at least one frequency divider dividing the oscillator frequency into a reference frequency which is stored in at least one phase sensitive detector.

20. (currently amended) The device according to claim 19 in which a frequency from one frequency divider of the oscillator frequency is stored as a reference in [[one]] the first phase-sensitive detector and a frequency from another frequency divider dividing the oscillator frequency is stored as a reference in ~~another~~ the second phase-sensitive detector.

21. (currently amended) The device according to claim 13, wherein respective field generators are provided which are controlled by the frequencies of the frequency dividers.

22. (previously presented) The device according to claim 12 comprising at least one frequency multiplier.

23. (previously presented) The device according to claim 12, wherein the magnetic field sensor is configured as a differential field sensor.

24. (previously presented) The device according to claim 12, wherein the magnetic field sensor comprises two partial coils of the same construction type.

25. (previously presented) The device according to claim 12, wherein the partial coils of the magnetic field sensor are wound in opposite sensors.

26. (previously presented) The device according to claim 12 wherein the partial coils of the magnetic field sensor are connected in series.

27. (previously presented) The device according to claim 12, wherein the container with the analyte is in contact with only one of the two partial coils of the magnetic field sensor.